Abstract of the Disclosure

The present invention provides for a scheduling data for transmission by an access point, such as a base station. The scheduling provides adaptive fairness control, which depends on how close the users are to a minimum data rate requirement. If desired, more emphasis can be placed on fairness when there are users close to the minimum data rate requirement and more emphasis on maximizing throughput when all of the users are far from the required minimum data rate. Scheduling can also guarantee a maximum drop rate for delay-sensitive data, assuming sufficient resources are available, as well as guarantee a minimum data transfer rate for all users by ensuring that users below their minimum requirement have a higher priority than users that exceed their minimum requirement. If there are not enough resources to satisfy each user's minimum data rate due to a failure of the call admission process, then the variance in throughput can be minimized for each class of users. The scheduling can also optimize scheduling parameters for multi-carrier systems by using the number of carriers to determine scheduling parameters for the delay-sensitive users in order to maximize throughput.